ABSTRACT OF THE DISCLOSURE

A display color buffer in a unified memory architecture is decoupled from main memory by partitioning the address space for the color buffer into a frame-preparation memory accessed by a graphics subsystem at a frame rate to prepare color data and a refresh memory that is accessed by a display device at a refresh rate to display the color data. The color data is periodically transferred between the frame-preparation memory and the refresh memory, or when a frame of color data is ready for display.